

Appln No. 10/552,325
Amdt date April 7, 2008
Reply to Office action of March 17, 2008

The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A bidirectional drive for rotating a drive wheel connected to an adjusting device into one or other drive direction with a drive lever that swivels about a drive axis starting from a neutral position into one or other direction and which is connected to a coupling element for expanding a spring element which is supported at least in part on a cylindrical drive face of the drive wheel and entrains the drive wheel in a circumferential direction by forming a contact bearing against the cylindrical drive face when the drive lever is moved away from the neutral position whilst with a return of the drive lever into the neutral position the contact bearing of the spring element against the cylindrical drive face of the drive wheel is lifted and the drive wheel is not entrained, wherein the coupling element includes expansion cams which are mounted at different radial distances from the drive axis and which are able to tilt about an axis spaced from the drive axis and which expand actuation levers connected to the spring element so that the spring element bearing against the cylindrical drive face of the drive wheel is widened out.
2. (Canceled)
3. (Previously Presented) The bidirectional drive according to claim 1, wherein at least one expansion cam is pretensioned and mounted radially displaceable between expansion faces of the actuation levers.
4. (Previously Presented) The bidirectional drive according to claim 3, wherein the pretensioned and radially displaceable expansion cam is wedge-shaped, is mounted between a first set of two contra wedge faces of the expansion faces of the actuation levers and is supported self-locking opposite the other expansion cam.

5. (Previously Presented) The bidirectional drive according to claim 4, wherein the other expansion cam is wedge-shaped with an oppositely aligned wedge shape to that of the one expansion cam and is tensioned between a second set of contra wedge faces of the actuation levers.

6. (Previously Presented) The bidirectional drive according to claim 5, wherein contact faces of the wedge-shaped expansion cams and the wedge faces of the actuation levers have a lower coefficient of friction than a reciprocal support of the wedge-shaped expansion cams.

7. (Previously Presented) The bidirectional drive according to claim 5 or 6, wherein the reciprocal support of the wedge-shaped expansion cams is formed wedge-shaped with a smaller wedge angle compared to a wedge angle included between the contact faces of the wedge-shaped expansion cams and the wedge faces of the actuation levers.

8. (Previously Presented) A bidirectional drive for rotating a drive wheel connected to an adjusting device into one or other drive direction with a drive lever that swivels about a drive axis starting from a neutral position into one or other direction and which is connected to a coupling element for expanding a spring element which is supported at least in part on a cylindrical drive face of the drive wheel and entrains the drive wheel in a circumferential direction by forming a contact bearing against the cylindrical drive face when the drive lever is moved away from the neutral position whilst with a return of the drive lever into the neutral position the contact bearing of the spring element against the cylindrical drive face of the drive wheel is lifted and the drive wheel is not entrained, wherein the coupling element includes expansion cams which are able to tilt about an axis spaced from the drive axis and which expand actuation levers connected to the spring element so that the spring element bearing against the cylindrical drive face of the drive wheel is widened out, wherein the spring element comprises a spring strip whose ends are aligned parallel to each other and are inserted into sockets of the actuation levers.

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9. (Previously Presented) The bidirectional drive according to claim 8, wherein the spring strip is pretensioned.
10. (Previously Presented) The bidirectional drive according to claim 8 or 9, wherein the actuation levers are disc-shaped and have a peripheral surface which is adapted at least in part to the cylindrical drive face of the drive wheel.
11. (Previously Presented) The bidirectional drive according to claim 8 or 9, wherein the actuation levers comprise a one-piece spring-elastic expansion lever which includes the expansion cams and drive axis and has on a side opposite the expansion cams in relation to the drive axis an elastic web which takes up tensile forces.
12. (Previously Presented) The bidirectional drive according to claim 11, comprising a shaped part containing both the expansion lever and a circumferential face adapted to the drive face of the drive wheel.
13. (Previously Presented) The bidirectional drive according to claim 12, wherein the shaped part comprises one of a stamped steel part, a plastics part and a sintered part and is insertable without pretension into a interior space of the drive wheel.
14. (Previously Presented) The bidirectional drive according to claim 8, wherein between the actuation levers are resetting springs arranged so that the actuation levers move the expansion cams after swivel movement of the drive lever back into an initial position corresponding to the neutral position of the drive lever.
15. (Previously Presented) The bidirectional drive according to claim 1, wherein between the drive lever and a locally fixed stop on a housing of the bidirectional drive is a lever-resetting spring arranged to move the drive lever after swivel movement back into the neutral position.

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16. (Previously Presented) The bidirectional drive according to claim 1, wherein the expansion cams are arranged on a reinforcement lever supported for swivel movement on the drive lever.

17. (Previously Presented) The bidirectional drive according to claim 16, wherein an attachment of the reinforcement lever on the drive lever is arranged radially aligned with the expansion cams. •

18. (Previously Presented) The bidirectional drive according to claim 17, wherein an attachment of the reinforcement lever to the drive lever is provided on a same side in relation to the drive axis as the expansion cams.

19. (Previously Presented) The bidirectional drive according to claim 17, wherein an attachment of the reinforcement lever on the drive lever is mounted on a side of the reinforcement lever opposite one expansion cam in relation to the drive axis.

20. (Previously Presented) A bidirectional drive for rotating a drive wheel connected to an adjusting device into one or other drive direction with a drive lever that swivels about a drive axis starting from a neutral position into one or other direction and which is connected to a coupling element for expanding a spring element which is supported at least in part on a cylindrical drive face of the drive wheel and entrains the drive wheel in a circumferential direction by forming a contact bearing against the cylindrical drive face when the drive lever is moved away from the neutral position whilst with a return of the drive lever into the neutral position the contact bearing of the spring element against the cylindrical drive face of the drive wheel is lifted and the drive wheel is not entrained, wherein the coupling element includes expansion cams which are able to tilt about an axis spaced from the drive axis and which expand actuation levers connected to the spring element so that the spring element bearing against the cylindrical drive face of the drive wheel is widened out, wherein the drive lever is attached to the drive axis by an oblong hole.

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21. (Previously Presented) The bidirectional drive according to claim 1, wherein the drive lever is attached to the drive axis through a bore adapted to a diameter of the drive axis.
22. (Previously Presented) The bidirectional drive according to claim 16, wherein the drive lever is mounted substantially without play on the drive axis and that the reinforcement lever is mounted on the drive axis through an oblong hole.
23. (Previously Presented) The bidirectional drive according to claim 8 wherein the actuation levers comprise a one-piece spring-elastic expansion lever which includes the expansion cams and drive axis and has on a side opposite the expansion cams in relation to the drive axis an elastic web which takes up tensile forces and wherein resetting springs are arranged so that the expansion lever moves the expansion cams after swivel movement of the drive lever back into an initial position corresponding to the neutral position of the drive lever.